

1106-VD-906 **Theodore S. Erickson*** (erickson@wju.edu), Mathematics Department, Wheeling Jesuit University, 316 Washington Avenue, Wheeling, WV 26003. *A Flipped Calculus III class*. Preliminary report.

The multivariable calculus materials by Denis Auroux, et al. from Open Courseware at MIT was an obvious choice for use in a “flipped pedagogy” class. These materials have been available for several years with 50 minute lecture videos but are now broken into short video segments each focusing on one specific topic. Moreover, recitation videos, complete set of notes and exercises are included, so no text is needed.

The classroom setting is also important, so that working groups can easily function. Our principal mathematics classroom is furnished with 6 large conference tables with four swivel office chairs at each table. An Apple TV is connected to a high definition projection camera so a laptop or an iPad can link to the projector using AirPlay. The class time is broken into three segments: first each student writes two important concepts from the videos on the marking board, followed by clarifications of these concepts, and time spent problem solving in students pairs. Preliminary observations reveal a conversational atmosphere and active learning. (Received September 08, 2014)